TARGET RECOGNITION APPARATUS

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ABSTRACT OF THE DISCLOSURE

A target recognition apparatus that improves a
recognition rate of a target by emphasizing vertical

10   components of picked-up images, even if the target has a
round shape of which the edges are is difficult to
extract. The target recognition apparatus carries out
the following processes. It compresses two images that
have been simultaneously picked up with a left camera and

15   a right camera that are mounted on a vehicle, in a
lateral direction respectively. It detects both ends of
the target in the two images, based on gradations of
pixels in the images that have been compressed in this
lateral direction. It measures a distance to the target,

20   based on a parallax of the both detected ends of the
target. A searching area of a target can be set based on
the images compressed in a lateral direction.